Nuclear Instruments and Methods in Physics Research B36 (1989) 503–508
North-Holland, Amsterdam

AUTHOR INDEX

Allen, L.H., see Li, J. B36 (1989) 153
Andersson, A.B.C., see Whitlow, H.J. B36 (1989) 53
Andreani, C., V. Merlo and M.A. Ricci, A procedure for multiple scattering corrections in a neutron incoherent inelastic scattering experiment B36 (1989) 216
Armour, D.G., see Orrman-Rossiter, K.G. B36 (1989) 446
Ascheron, C., A. Schindler, R. Flagmeyer and G. Otto, A comparative study of swelling, strain and radiation damage of high-energy proton-bombarded GaAs, GaP, InP, Si and Ge single crystals B36 (1989) 163
Asenov, S., see Ruskov, T. B36 (1989) 82

Badheka, R., see Orrman-Rossiter, K.G. B36 (1989) 446
Baht, R.S., see Orrman-Rossiter, K.G. B36 (1989) 446
Barbour, J.C., see Brice, D.K. B36 (1989) 431
Barraclough, B.L., see Borovsky, J.E. B36 (1989) 377
Baskes, M.I., see Sigmund, P. B36 (1989) 110
Baumann, H, see Hoffmann, B. B36 (1989) 157
Baumann, H., see Hoffmann, B. B36 (1989) 30
Beauvillain, J., see Vieu, C. B36 (1989) 137
Benenson, R.E., see Berning, P. B36 (1989) 335
Berning, P. and R.E. Benenson, Backscattering analysis for oxygen profiling using $^{16}O(\alpha, \alpha)^{16}O$ 3.05 MeV resonance parameters B36 (1989) 335
Bethge, K., see Liebler, V. B36 (1989) 7
Bethge, K., see Hoffmann, B. B36 (1989) 30
Bethge, K., see Hoffmann, B. B36 (1989) 157
Betz, G., see Sigmund, P. B36 (1989) 110
Bimbot, R., see Hubert, F. B36 (1989) 357
Blue, J.W., see Durham, J.S. B36 (1989) 319
Blue, T.E., see Durham, J.S. B36 (1989) 319
Boerma, D.O., E.P. Smit and N. Roosnek, PIXE trace-element determination and its accuracy in the analysis of bile B36 (1989) 60
Børgesen, P. and D.A. Lilienfeld, Stopping cross sections for RBS-analysis of high-T_c superconductors B36 (1989) 1
Borovsky, J.E. and B.L. Barraclough, High-velocity ionic projectiles interacting with metals: models and measurements of secondary-electron yields from gold and aluminum targets struck by 13.5–31.5 MeV ^{7}Li and 9–63 MeV ^{12}C B36 (1989) 377
Bøttiger, J. (*Book review*: Ion implantation 1988, edited by F.H. Wöhlbier) B36 (1989) 98
Brice, D.K. and J.C. Barbour, Sputtering of (100) Si by keV Co implantation B36 (1989) 431

Capuj, N.E., see Jakas, M.M. B36 (1989) 491
Carter, G., M.J. Nobes and I.V. Katardjiev, The deduction of ballistic atomic mixing rates from high fluence ion implant collection depth distributions B36 (1989) 404
Cesareo, R., see Ferretti, M. B36 (1989) 194
Chakarov, I.R., see Sigmund, P. B36 (1989) 110
Chakarvarti, S.K., see Singh, P. B36 (1989) 211
Chaturvedi, U.K., see Pathak, R. B36 (1989) 38
Chen Zhengyuan and Liu Jiarui, Direct evidence of chemical reactions associated with MeV ion-beam enhanced adhesion B36 (1989) 173
Claverie, A., see Vieu, C. B36 (1989) 137
Cui, F.Z., see Sigmund, P. B36 (1989) 110
Czekaj, D., E.K. Hollmann, A.B. Kozirev, V.A. Volpyas and A.G. Zaytsev, Electric potential distribution effects in dc diode sputtering discharges B36 (1989) 316

Dawson, J.B., see Sutton, S.R. B36 (1989) 206
Dedkov, G.V., Interatomic interaction potentials in the electron gas approximation static case B36 (1989) 14

0168-583X/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Dunlop, A., D. Lesueur, G. Jaskierowicz and J. Schildknecht, Influence of very high electronic energy losses on defect configurations in self-ion irradiated iron ... B36 (1989) 412
Durham, J.S., T.E. Blue, B.W. Wehring, M.H. Ragheb and J.W. Blue, Microdosimetry in fast-neutron therapy by automatic readout of CR-39 solid state nuclear track detectors ... B36 (1989) 319
Dwivedi, K.K., see Saxena, A. ... B36 (1989) 276

Eckstein, W., see Sigmund, P. ... B36 (1989) 110
Engström, P., S. Larsson, A. Rindby and B. Stocklassa, A 200 μm X-ray microbeam spectrometer ... B36 (1989) 222

Farny, J. and E. Woryna, On the occurrence of an additional range deficit in track detectors ... B36 (1989) 489
Faure, J., see Vieu, C. ... B36 (1989) 137
Ferretti, M., R. Cesareo, M. Marabelli and G. Guida, The analysis of bronze alloys from the equestrian statue of Marco Aurelio by means of a thin sample XRF technique ... B36 (1989) 194
Fiedler, G., see Saxena, A. ... B36 (1989) 276
Flagmeyer, R., see Ascheron, C. ... B36 (1989) 163
Folger, H., see Steinhof, A. ... B36 (198[0]) 93
Friedrich, J., see Pieroth, M. ... B36 (1989) 263
Fuchs, G., see Massouras, G. ... B36 (1989) 148
Fukahori, T., Y. Kanda, H. Tobimatsu, Y. Maeda and K. Yamada, Helium trapping and surface deformation of helium-ion-implantated aluminium ... B36 (1989) 312

Gauvin, H., see Hubert, F. ... B36 (1989) 357
Gertner, I., O. Heber, J. Zajfman, D. Zajfman and B. Rosner, Comparison between two computer codes for PIXE studies applied to trace element analysis in amniotic fluid ... B36 (1989) 74
Glawischnig, H., see Ploss, R. ... B36 (1989) 439
Greenway, T.J.L., see Rasmussen, K.L. ... B36 (1989) 43
Grover, A.K., see Prasad, K.G. ... B36 (1989) 485
Guida, G., see Ferretti, M. ... B36 (1989) 194
Gwozdz, R., see Rasmussen, K.L. ... B36 (1989) 43

Håkansson, P., see Hallén, A. ... B36 (1989) 345
Hallén, A., P.A. Ingemarsson, P. Håkansson, B.U.R. Sundqvist and G. Possnert, An MeV-ion implanter for large area applications ... B36 (1989) 345
Hanawa, T., see Shoji, F. ... B36 (1989) 23
Hao, J., see Yin, Z. ... B36 (1989) 471
Harley-Stead, M., see Ploss, R. ... B36 (1989) 439
Harrison, D.E., see Sigmund, P. ... B36 (1989) 110
Haugen, H. (*Book review*: Multiphoton processes, edited by S.J. Smith and P.L. Knight) ... B36 (1989) 496
Hautala, M., see Sigmund, P. ... B36 (1989) 110
Heber, O., see Gertner, I. ... B36 (1989) 74
Henning, W., see Steinhof, A. ... B36 (1989) 93
Hertel, N. (*Book review*: PIXE. A novel technique for elemental analysis, by S.A.E. Johansson and J.L. Campbell) ... B36 (1989) 495
Hoffmann, B., H. Baumann, F. Rauch and K. Bethge, Ion implantation of Fe and Pd into Ti in the presence of residual and backfilled gases ... B36 (1989) 30
Hoffmann, B., H Baumann, F. Rauch and K. Bethge, Ion implantaion of Ti into Al and of Al into Ti in the presence of residual and backfilled gases ... B36 (1989) 157
Hollmann, E.K., see Czekaj, D. ... B36 (1989) 316
Hosaka, S., see Sigmund, P. ... B36 (1989) 110
Hubbard, K.M., R.A. Weller, D.L. Weathers and T.A. Tombrello, The angular distribution of atoms sputtered from a Ga–In eutectic alloy target ... B36 (1989) 395
Hubert, F., R. Bimbot and H. Gauvin, Semi-empirical formulae for heavy ion stopping powers in solids in the intermediate energy range ... B36 (1989) 357
Husinsky, W., see Sigmund, P. ... B36 (1989) 110
Hussain, A.H., see Khaliquzzaman, M. ... B36 (1989) 259

Ingemarsson, P.A., see Hallén, A. ... B36 (1989) 345
Ishitani, T., see Sigmund, P. ... B36 (1989) 110
Ispirian, K.A. and A.T. Margarian, Monte Carlo calculation of ionization energy-loss distributions taking δ-electron escape into account ... B36 (1989) 364

Jakas, M.M. and N.E. Capuj, Scaling for the angular variation of the energy loss of ions induced by foil inhomogeneities (*Letter to the Editor*) ... B36 (1989) 491
Jaskierowicz, G., see Dunlop, A. ... B36 (1989) 412
Jiang, X., see Yin, Z. ... B36 (1989) 471
Jimenez Rodriguez, J.J., see Vicanek, M. ... B36 (1989) 124
Johnson, E. (*Book review*: Analytical techniques for thin films, edited by K.N. Tu and R. Rosenberg) ... B36 (1989) 232
Jones, K.W., see Sutton, S.R. ... B36 (1989) 206
Jr, see Sigmund, P. ... B36 (1989) 110

Kanda, Y., see Fukahori, T. ... B36 (1989) 312
Karpuzov, D.S., see Sigmund, P. ... B36 (1989) 110
Katardjiev, I.V., see Carter, G. ... B36 (1989) 404
Kawatoh, E., see Sigmund, P. ... B36 (1989) 110
Khaliquzzaman, M., S.T. Lam, T. Otsubo, A.H. Hussain and L.G. Stephens-Newsham, Yield of L_α X-rays from a light element matrix in thick-target PIXE ... B36 (1989) 259
Khubeis, I. and O. Meyer, Interstitial trapping in ion implanted Al(Ag) ... B36 (1989) 340
Kirov, A., see Ruskov, T. ... B36 (1989) 82
Kozirev, A.B., see Czekaj, D. ... B36 (1989) 316
Krauskopf, J., see Liebler, V. ... B36 (1989) 7
Kumar, A., M.R. Singh and K.C. Tripathi, Mössbauer scatterer thickness for studying interference effects in polycrystalline samples ... B36 (1989) 189
Kurakin, I.B., see Pogrebnjak, A.D. ... B36 (1989) 286
Kurup, M.B., see Prasad, K.G. ... B36 (1989) 485

Lam, S.T., see Khaliquzzaman, M. ... B36 (1989) 259
Larsson, S., see Engström, P. ... B36 (1989) 222
Lehner, K., see Ploss, R. ... B36 (1989) 439
LeRose, J., see Pieroth, M. ... B36 (1989) 263
Lesueur, D., see Dunlop, A. ... B36 (1989) 412
Li, J., L.H. Allen and J.W. Mayer, Ion mixing kinetics study by in situ resistance measurements in the Au/Si system ... B36 (1989) 153
Li, J., J.C. Liu and J.W. Mayer, Ar^+ ion irradiation induced grain growth in Au and Pt thin films ... B36 (1989) 306
Li, Z., see Yin, Z. ... B36 (1989) 471
Liebler, V., K. Bethge, J. Krauskopf, J.D. Meyer, P. Misaelides and G. Wolf, Determination of excitation functions for carbon detection by charged particle activation analysis ... B36 (1989) 7
Ligachev, A.E., see Pogrebnjak, A.D. ... B36 (1989) 286
Lilienfeld, D.A., see Børgesen, P. ... B36 (1989) 1
Liu, J.C., see Li, J. ... B36 (1989) 306
Liu Jiarui, see Chen Zhengyuan ... B36 (1989) 173
Liu, Z., see Yin, Z. ... B36 (1989) 471
Liu, Z., see Yin, Z. ... B36 (1989) 471
Lövestam, N.E.G., Development of the Lund proton microprobe scanning and data acquisition system ... B36 (1989) 455
Lu Xiting, Xia Zonghuang, Shen Dingyu, Mao Lian and Wang Xuemei, Measurement of stopping powers for ^{19}F ions at 6.5 MeV in Al (*Letter to the Editor*) ... B36 (1989) 350

Ma, C., see Yin, Z. ... B36 (1989) 471
Ma, S., see Yin, Z. ... B36 (1989) 471
Maeda, Y., see Fukahori, T. ... B36 (1989) 312
Mao Lian, see Lu Xiting ... B36 (1989) 350
Marabelli, M., see Ferretti, M. ... B36 (1989) 194
Margarian, A.T., see Ispirian, K.A. ... B36 (1989) 364
Massouras, G., J.A. Roger, L. Romana and G. Fuchs, Si^+ ion beam mixing of tin layers on crystalline silicon ... B36 (1989) 148
Mayer, J.W., see Li, J. ... B36 (1989) 153
Mayer, J.W., see Li, J. ... B36 (1989) 306
Menon, V.J., see Pathak, R. ... B36 (1989) 38
Merlo, V., see Andreani, C. ... B36 (1989) 216
Meyer, J.D., see Liebler, V. ... B36 (1989) 7
Meyer, O., see Khubeis, I. ... B36 (1989) 340
Miglierini, M., Justification of various fitting profiles for the Mössbauer spectrum analysis of metallic glasses ... B36 (1989) 475
Miller, S.G., Synopsis of the extension of the Integrated Tiger Series (ITS) of electron/photon Monte Carlo codes to 100 GeV (*Letter to the Editor*) ... B36 (1989) 96

Misaelides, P., see Liebler, V. ... B36 (1989) 7
Mortensen, K. (*Book review*: Neutron scattering at a pulsed source, edited by R.J. Newport, B.D. Rainford and R. Cywinski) ... B36 (1989) 233
Müller, M., see Steinhof, A. ... B36 (1989) 93

Nieminen, R.M., see Sigmund, P. ... B36 (1989) 110
Nigam, A.K., see Pathak, R. ... B36 (1989) 38
Nikolaev, V.S. and V.A. Sidorovich, The single and double ionization of helium atoms by fast nuclei and multicharged ions ... B36 (1989) 239
Nobes, M.J., see Carter, G. ... B36 (1989) 404

O'Connor, D.J. and Tan Chunyu, Application of heavy ions to high depth resolution RBS ... B36 (1989) 178
Oddershede, J., see Sabin, J.R. ... B36 (1989) 249
Orrman-Rossiter, K.G., R.S. Baht, R. Badheka, M. Wadsworth and D.G. Armour, Medium energy ion scattering analysis of low energy chlorine ion bombarded gallium-arsenide ... B36 (1989) 446
Otsubo, T., see Khaliquzzaman, M. ... B36 (1989) 259
Otto, G., see Ascheron, C. ... B36 (1989) 163
Oura, K., see Shoji, F. ... B36 (1989) 23

Paic, A., see Steinhof, A. ... B36 (1989) 93
Pathak, R., V.J. Menon, U.K. Chaturvedi and A.K. Nigam, A modified diffusion-based model for radiolytically evolved gases during ion implantation in polymers ... B36 (1989) 38
Petersson, C.S., see Whitlow, H.J. ... B36 (1989) 53
Picraux, S.T. (*Book review*: Ion implantation science and technology (2nd edition), edited by J.F. Ziegler) ... B36 (1989) 494
Pieroth, M., J. Friedrich, P. Semmel, N. Voegler, J. LeRose and P.D. Zimmerman, Radiation tail in electron scattering: approximations in the calculation and comparison to measurements ... B36 (1989) 263
Ploss, R., M. Harley-Stead, S. Weisshuhn, K. Lehner and H. Glawischnig, Influence of structure process flow and high current implantation on gate oxide degradation ... B36 (1989) 439
Pogrebnjak, A.D., G.E. Remnev, I.B. Kurakin and A.E. Ligachev, Structural, physical and chemical changes induced in metals and alloys exposed to high power ion beams ... B36 (1989) 286
Posselt, M., Computer studies of statistical distribution functions of particles moving in ion-beam-induced collision cascades within amorphous solids ... B36 (1989) 420
Possnert, G., see Hallén, A. ... B36 (1989) 345
Prasad, K.G., M.B. Kurup, P. Singh, A.K. Grover and G.V. Subba Rao, Estimation of oxygen content in high T_c superconductors: an accelerator based method ... B36 (1989) 485

Ragheb, M.H., see Durham, J.S. ... B36 (1989) 319
Ramos, H.J., see Yamaoka, H. ... B36 (1989) 227
Rasmussen, K.L., T.J.L. Greenway and R. Gwozdz, The composition of kamacite in iron meteorites investigated by accelerator mass spectroscopy, neutron activation analysis and analytical electron microscopy ... B36 (1989) 43
Rauch, F., see Hoffmann, B. ... B36 (1989) 30
Rauch, F., see Hoffmann, B. ... B36 (1989) 157
Reichwein, E., see Saxena, A. ... B36 (1989) 276
Remnev, G.E., see Pogrebnjak, A.D. ... B36 (1989) 286
Ricci, M.A., see Andreani, C. ... B36 (1989) 216
Rindby, A., see Engström, P. ... B36 (1989) 222
Robinson, M.T., see Sigmund, P. ... B36 (1989) 110
Roeckl, E., see Steinhof, A. ... B36 (1989) 93
Roger, J.A., see Massouras, G. ... B36 (1989) 148
Romana, L., see Massouras, G. ... B36 (1989) 148
Roosnek, N., see Boerma, D.O. ... B36 (1989) 60
Rosner, B., see Gertner, I. ... B36 (1989) 74
Ruskov, R., see Ruskov, T. ... B36 (1989) 82
Ruskov, T., R. Ruskov, I. Spirov, A. Kirov, T. Tomov and S. Asenov, Searching for the electric dipole moment of the photon ... B36 (1989) 82

Sabin, J.R. and J. Oddershede, Predicted phase differences in proton stopping by alkali metal targets ... B36 (1989) 249
Sasao, M., see Yamaoka, H. ... B36 (1989) 227
Saxena, A., K.K. Dwivedi, E. Reichwein and G. Fiedler, Energy-loss measurement of ^{132}Xe in lead by a nuclear track technique ... B36 (1989) 276
Schildknecht, J., see Dunlop, A. ... B36 (1989) 412

Schindler, A., see Ascheron, C. B36 (1989) 163
Schüll, D., see Steinhof, A. B36 (1989) 93
Semmel, P., see Pieroth, M. B36 (1989) 263
Shapiro, M.H., see Sigmund, P. B36 (1989) 110
Shen Dingyu, see Lu Xiting B36 (1989) 350
Shimizu, R., see Sigmund, P. B36 (1989) 110
Shoji, F., K. Oura and T. Hanawa, High-resolution ion scattering spectrometry at energies ranging from 200 to 2000 eV B36 (1989) 23
Shulga, V.I., see Sigmund, P. B36 (1989) 110
Sidorovich, V.A., see Nikolaev, V.S. B36 (1989) 239
Sigmund, P., M.T. Robinson, M.I. Baskes, M. Hautala, F.Z. Cui, W. Eckstein, Y. Yamamura, S. Hosaka, T. Ishitani, V.I. Shulga, D.E. Harrison, Jr, I.R. Chakarov, D.S. Karpuzov, E. Kawatoh, R. Shimizu, S. Valkealahti, R.M. Nieminen, G. Betz, W. Husinsky, M.H. Shapiro, M. Vicanek and H.M. Urbassek, Round Robin computer simulation of ejection probability in sputtering B36 (1989) 110
Sigmund, P., see Vicanek, M. B36 (1989) 124
Singh, M.R., see Kumar, A. B36 (1989) 189
Singh, N., see Singh, P. B36 (1989) 211
Singh, P., N. Singh and S.K. Chakarvarti, ^{58}Ni ion track registration in cellulose nitrate CN-85 ..... B36 (1989) 211
Singh, P., see Prasad, K.G. B36 (1989) 485
Singh, R.C. and H.S. Virk, Effect of variation of incident angle of alpha particles at various field strengths on ECE response of CR-39 ..... B36 (1989) 332
Smit, E.P., see Boerma, D.O. B36 (1989) 60
Šmit, Ž., K-shell ECPSSR cross sections for analytical applications B36 (1989) 254
Smith, J.V., see Sutton, S.R. B36 (1989) 206
Spirov, I., see Ruskov, T. B36 (1989) 82
Steinhof, A., H. Folger, W. Henning, M. Müller, A. Paic, E. Roeckl and D. Schüll, Charge state distributions of potassium and calcium ions, and full-stripping probabilities in carbon foils for medium-heavy fast ions (*Letter to the Editor*) B36 (1989) 93
Stephens-Newsham, L.G., see Khaliquzzaman, M. B36 (1989) 259
Stocklassa, B., see Engström, P. B36 (1989) 222
Subba Rao, G.V., see Prasad, K.G. B36 (1989) 485
Sundqvist, B.U.R., see Hallén, A. B36 (1989) 345
Sutton, S.R., J.V. Smith, K.W. Jones and J.B. Dawson, Nitrogen microanalyses of silicates using the ^{14}N(d, α)^{12}C nuclear reaction and initial results on upper mantle and peralkaline magmatic micas B36 (1989) 206
Szabó, Gy. and L. Zolnai, PIXASE: a computer package for evaluation of PIXE spectrum series. Part II Calculation of the effective cross sections for X-ray production B36 (1989) 88

Tan Chunyu, see O'Connor, D.J. B36 (1989) 178
Tikhomirov, V.V., Simulation of multi-GeV electron energy losses in crystals B36 (1989) 282
Tikkanen, P., Electronic stopping power of Ta for $Z = 11$–18 atoms at energies 0–0.8 MeV/nucleon B36 (1989) 103
Tobimatsu, H., see Fukahori, T. B36 (1989) 312
Tombrello, T.A., see Hubbard, K.M. B36 (1989) 395
Tomov, T., see Ruskov, T. B36 (1989) 82
Tripathi, K.C., see Kumar, A. B36 (1989) 189

Urbassek, H.M., see Sigmund, P. B36 (1989) 110

Valkealahti, S., see Sigmund, P. B36 (1989) 110
Vicanek, M., see Sigmund, P. B36 (1989) 110
Vicanek, M., J.J. Jimenez Rodriguez and P. Sigmund, Depth of origin and angular spectrum of sputtered atoms B36 (1989) 124
Vieu, C., A. Claverie, J. Faure and J. Beauvillain, A spatial damage energy distribution calculation for ion-implanted materials B36 (1989) 137
Virk, H.S., see Singh, R.C. B36 (1989) 332
Voegler, N., see Pieroth, M. B36 (1989) 263
Volpyas, V.A., see Czekaj, D. B36 (1989) 316
Vourvopoulos, G. and P.C. Womble, On-line sulfur determination in coal with prompt gamma neutron activation B36 (1989) 200

Wada, M., see Yamaoka, H. B36 (1989) 227
Wadsworth, M., see Orrman-Rossiter, K.G. B36 (1989) 446
Wang Xuemei, see Lu Xiting B36 (1989) 350

Weathers, D.L., see Hubbard, K.M. B36 (1989) 395
Wehring, B.W., see Durham, J.S. B36 (1989) 319
Weisshuhn, S., see Ploss, R. B36 (1989) 439
Weller, R.A., see Hubbard, K.M. B36 (1989) 395
Whitlow, H.J., A.B.C. Andersson and C.S. Petersson, Thermally grown SiO_2 film standards for elastic recoil detection analysis B36 (1989) 53
Wolf, G., see Liebler, V. B36 (1989) 7
Womble, P.C., see Vourvopoulos, G. B36 (1989) 200
Woryna, E., see Farny, J. B36 (1989) 489

Xia Zonghuang, see Lu Xiting B36 (1989) 350

Yamada, K., see Fukahori, T. B36 (1989) 312
Yamamura, Y., see Sigmund, P. B36 (1989) 110
Yamaoka, H., M. Sasao, M. Wada and H.J. Ramos, A real-time method for monitoring the work function of a surface conversion negative ion source B36 (1989) 227
Yang, K., see Yin, Z. B36 (1989) 471
Yin, Z., S. Zhang, X. Jiang, C. Ma, Z. Li, J. Hao, Z. Zheng, Z. Liu, Z. Liu, S. Ma and K. Yang, Optimization experiments on a PIXE system and its application to the analysis of trace elements in Shaji B36 (1989) 471

Zajfman, D., see Gertner, I. B36 (1989) 74
Zajfman, J., see Gertner, I. B36 (1989) 74
Zaytsev, A.G., see Czekaj, D. B36 (1989) 316
Zhang, S., see Yin, Z. B36 (1989) 471
Zheng, Z., see Yin, Z. B36 (1989) 471
Zimmerman, P.D., see Pieroth, M. B36 (1989) 263
Zolnai, L., see Szabó, Gy. B36 (1989) 88

Nuclear Instruments and Methods in Physics Research B36 (1989) 509–511
North-Holland, Amsterdam

SUBJECT INDEX

Basic data for materials modification and analysis

Stopping cross sections for RBS-analysis of high-T_c superconductors, Børgesen, P. and D.A. Lilienfeld B36 (1989) 1
Determination of excitation functions for carbon detection by charged particle activation analysis, Liebler, V., K. Bethge, J. Krauskopf, J.D. Meyer, P. Misaelides and G. Wolf B36 (1989) 7
Interatomic interaction potentials in the electron gas approximation static case, Dedkov, G.V. B36 (1989) 14
Electronic stopping power of Ta for $Z = 11–18$ atoms at energies 0–0.8 MeV/nucleon, Tikkanen, P. B36 (1989) 103
The single and double ionization of helium atoms by fast nuclei and multicharged ions, Nikolaev, V.S. and V.A. Sidorovich B36 (1989) 239
Predicted phase differences in proton stopping by alkali metal targets, Sabin, J.R. and J. Oddershede B36 (1989) 249
K-shell ECPSSR cross sections for analytical applications, Šmit, Ž. B36 (1989) 254
Yield of L_α X-rays from a light element matrix in thick-target PIXE, Khaliquzzaman, M., S.T. Lam, T. Otsubo, A.H. Hussain and L.G. Stephens-Newsham B36 (1989) 259
Radiation tail in electron scattering: approximations in the calculation and comparison to measurements, Pieroth, M., J. Friedrich, P. Semmel, N. Voegler, J. LeRose and P.D. Zimmerman B36 (1989) 263
Energy-loss measurement of ^{132}Xe in lead by a nuclear track technique, Saxena, A., K.K. Dwivedi, E. Reichwein and G. Fiedler B36 (1989) 276
Semi-empirical formulae for heavy ion stopping powers in solids in the intermediate energy range, Hubert, F., R. Bimbot and H. Gauvin B36 (1989) 357
Monte Carlo calculation of ionization energy-loss distributions taking δ-electron escape into account, Ispirian, K.A. and A.T. Margarian B36 (1989) 364

Atomic collisions in solids

High-resolution ion scattering spectrometry at energies ranging from 200 to 2000 eV, Shoji, F., K. Oura and T. Hanawa B36 (1989) 23
Round Robin computer simulation of ejection probability in sputtering, Sigmund, P., M.T. Robinson, M.I. Baskes, M. Hautala, F.Z. Cui, W. Eckstein, Y. Yamamura, S. Hosaka, T. Ishitani, V.I. Shulga, D.E. Harrison, Jr, I.R. Chakarov, D.S. Karpuzov, E. Kawatoh, R. Shimizu, S. Valkealahti, R.M. Nieminen, G. Betz, W.Husinsky, M.H. Shapiro, M. Vicanek and H.M. Urbassek B36 (1989) 110
Depth of origin and angular spectrum of sputtered atoms, Vicanek, M., J.J. Jimenez Rodriguez and P. Sigmund B36 (1989) 124
A spatial damage energy distribution calculation for ion-implanted materials, Vieu, C., A. Claverie, J. Faure and J. Beauvillain B36 (1989) 137
Simulation of multi-GeV electron energy losses in crystals, Tikhomirov, V.V. B36 (1989) 282
High-velocity ionic projectiles interacting with metals: models and measurements of secondary-electron yields from gold and aluminum targets struck by 13.5–31.5 MeV ^7Li and 9–63 MeV ^{12}C, Borovsky, J.E. and B.L. Barraclough B36 (1989) 377
The angular distribution of atoms sputtered from a Ga–In eutectic alloy target, Hubbard, K.M., R.A. Weller, D.L. Weathers and T.A. Tombrello B36 (1989) 395
The deduction of ballistic atomic mixing rates from high fluence ion implant collection depth distributions, Carter, G., M.J. Nobes and I.V. Katardjiev B36 (1989) 404
Influence of very high electronic energy losses on defect configurations in self-ion irradiated iron, Dunlop, A., D. Lesueur, G. Jaskierowicz and J. Schildknecht B36 (1989) 412
Computer studies of statistical distribution functions of particles moving in ion-beam-induced collision cascades within amorphous solids, Posselt, M. B36 (1989) 420
Sputtering of (100) Si by keV Co implantation, Brice, D.K. and J.C. Barbour B36 (1989) 431

Ion beam modification of materials

Ion implantation of Fe and Pd into Ti in the presence of residual and backfilled gases, Hoffmann, B., H. Baumann, F. Rauch and K. Bethge B36 (1989) 30

0168-583X/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

A modified diffusion-based model for radiolytically evolved gases during ion implantation in polymers, Pathak, R., V.J. Menon, U.K. Chaturvedi and A.K. Nigam B36 (1989) 38
Si^+ ion beam mixing of tin layers on crystalline silicon, Massouras, G., J.A. Roger, L. Romana and G. Fuchs .. B36 (1989) 148
Ion mixing kinetics study by in situ resistance measurements in the Au/Si system, Li, J., L.H. Allen and J.W. Mayer B36 (1989) 153
Ion implantaion of Ti into Al and of Al into Ti in the presence of residual and backfilled gases, Hoffmann, B., H Baumann, F. Rauch and K. Bethge B36 (1989) 157
A comparative study of swelling, strain and radiation damage of high-energy proton-bombarded GaAs, GaP, InP, Si and Ge single crystals, Ascheron, C., A. Schindler, R. Flagmeyer and G. Otto B36 (1989) 163
Direct evidence of chemical reactions associated with MeV ion-beam enhanced adhesion, Chen Zhengyuan and Liu Jiarui B36 (1989) 173
Structural, physical and chemical changes induced in metals and alloys exposed to high power ion beams, Pogrebnjak, A.D., G.E. Remnev, I.B. Kurakin and A.E. Ligachev B36 (1989) 286
Ar^+ ion irradiation induced grain growth in Au and Pt thin films, Li, J., J.C. Liu and J.W. Mayer B36 (1989) 306
Helium trapping and surface deformation of helium-ion-implantated aluminium, Fukahori, T., Y. Kanda, H. Tobimatsu, Y. Maeda and K. Yamada B36 (1989) 312
Electric potential distribution effects in dc diode sputtering discharges, Czekaj, D., E.K. Hollmann, A.B. Kozirev, V.A. Volpyas and A.G. Zaytsev B36 (1989) 316
Influence of structure process flow and high current implantation on gate oxide degradation, Ploss, R., M. Harley-Stead, S. Weisshuhn, K. Lehner and H. Glawischnig B36 (1989) 439

Effects of radiation

^{58}Ni ion track registration in cellulose nitrate CN-85, Singh, P., N. Singh and S.K. Chakarvarti B36 (1989) 211
Microdosimetry in fast-neutron therapy by automatic readout of CR-39 solid state nuclear track detectors, Durham, J.S., T.E. Blue, B.W. Wehring, M.H. Ragheb and J.W. Blue B36 (1989) 319
Effect of variation of incident angle of alpha particles at various field strengths on ECE response of CR-39, Singh, R.C. and H.S. Virk B36 (1989) 332
On the occurrence of an additional range deficit in track detectors, Farny, J. and E. Woryna B36 (1989) 489

Analysis of materials

The composition of kamacite in iron meteorites investigated by accelerator mass spectroscopy, neutron activation analysis and analytical electron microscopy, Rasmussen, K.L., T.J.L. Greenway and R. Gwozdz .. B36 (1989) 43
Thermally grown SiO_2 film standards for elastic recoil detection analysis, Whitlow, H.J., A.B.C. Andersson and C.S. Petersson B36 (1989) 53
PIXE trace-element determination and its accuracy in the analysis of bile, Boerma, D.O., E.P. Smit and N. Roosnek B36 (1989) 60
Comparison between two computer codes for PIXE studies applied to trace element analysis in amniotic fluid, Gertner, I., O. Heber, J. Zajfman, D. Zajfman and B. Rosner B36 (1989) 74
Searching for the electric dipole moment of the photon, Ruskov, T., R. Ruskov, I. Spirov, A. Kirov, T. Tomov and S. Asenov B36 (1989) 82
Application of heavy ions to high depth resolution RBS, O'Connor, D.J. and Tan Chunyu B36 (1989) 178
Mössbauer scatterer thickness for studying interference effects in polycrystalline samples, Kumar, A., M.R. Singh and K.C. Tripathi B36 (1989) 189
The analysis of bronze alloys from the equestrian statue of Marco Aurelio by means of a thin sample XRF technique, Ferretti, M., R. Cesareo, M. Marabelli and G. Guida B36 (1989) 194
On-line sulfur determination in coal with prompt gamma neutron activation, Vourvopoulos, G. and P.C. Womble B36 (1989) 200
Nitrogen microanalyses of silicates using the $^{14}N(d, \alpha)^{12}C$ nuclear reaction and initial results on upper mantle and peralkaline magmatic micas, Sutton, S.R., J.V. Smith, K.W. Jones and J.B. Dawson B36 (1989) 206
Backscattering analysis for oxygen profiling using $^{16}O(\alpha, \alpha)^{16}O$ 3.05 MeV resonance parameters, Berning, P. and R.E. Benenson B36 (1989) 335
Interstitial trapping in ion implanted Al(Ag), Khubeis, I. and O. Meyer B36 (1989) 340
Medium energy ion scattering analysis of low energy chlorine ion bombarded gallium-arsenide, Orrman-Rossiter, K.G., R.S. Baht, R. Badheka, M. Wadsworth and D.G. Armour B36 (1989) 446
Development of the Lund proton microprobe scanning and data acquisition system, Lövestam, N.E.G. B36 (1989) 455
Optimization experiments on a PIXE system and its application to the analysis of trace elements in Shaji, Yin, Z., S. Zhang, X. Jiang, C. Ma, Z. Li, J. Hao, Z. Zheng, Z. Liu, Z. Liu, S. Ma and K. Yang B36 (1989) 471
Justification of various fitting profiles for the Mössbauer spectrum analysis of metallic glasses, Miglierini, M. .. B36 (1989) 475

Estimation of oxygen content in high T_c superconductors: an accelerator based method, Prasad, K.G., M.B. Kurup, P. Singh, A.K. Grover and G.V. Subba Rao B36 (1989) 485

Experimental methods and equipment

PIXASE: a computer package for evaluation of PIXE spectrum series. Part II. Calculation of the effective cross sections for X-ray production, Szabó, Gy. and L. Zolnai B36 (1989) 88
A procedure for multiple scattering corrections in a neutron incoherent inelastic scattering experiment, Andreani, C., V. Merlo and M.A. Ricci B36 (1989) 216
A 200 μm X-ray microbeam spectrometer, Engström, P., S. Larsson, A. Rindby and B. Stocklassa B36 (1989) 222
A real-time method for monitoring the work function of a surface conversion negative ion source, Yamaoka, H., M. Sasao, M. Wada and H.J. Ramos B36 (1989) 227
An MeV-ion implanter for large area applications, Hallén, A., P.A. Ingemarsson, P. Håkansson, B.U.R. Sundqvist and G. Possnert B36 (1989) 345

Letters to the editor

Charge state distributions of potassium and calcium ions, and full-stripping probabilities in carbon foils for medium-heavy fast ions, Steinhof, A., H. Folger, W. Henning, M. Müller, A. Paic, E. Roeckl and D. Schüll . B36 (1989) 93
Synopsis of the extension of the Integrated Tiger Series (ITS) of electron/photon Monte Carlo codes to 100 GeV, Miller, S.G. B36 (1989) 96
Measurement of stopping powers for ^{19}F ions at 6.5 MeV in Al, Lu Xiting, Xia Zonghuang, Shen Dingyu, Mao Lian and Wang Xuemei B36 (1989) 350
Scaling for the angular variation of the energy loss of ions induced by foil inhomogeneities, Jakas, M.M. and N.E. Capuj B36 (1989) 491

Book reviews

Ion implantation 1988, edited by F.H. Wöhlbier (Reviewer: J. Bøttiger) B36 (1989) 98
Analytical techniques for thin films, edited by K.N. Tu and R. Rosenberg (Reviewer: E. Johnson) B36 (1989) 232
Neutron scattering at a pulsed source, edited by R.J. Newport, B.D. Rainford and R. Cywinski (Reviewer: K. Mortensen) B36 (1989) 233
Ion implantation science and technology (2nd edition), edited by J.F. Ziegler (Reviewer: S.T. Picraux) B36 (1989) 494
PIXE. A novel technique for elemental analysis, by S.A.E. Johansson and J.L. Campbell (Reviewer: N. Hertel) . B36 (1989) 495
Multiphoton processes, edited by S.J. Smith and P.L. Knight (Reviewer: H. Haugen) B36 (1989) 496